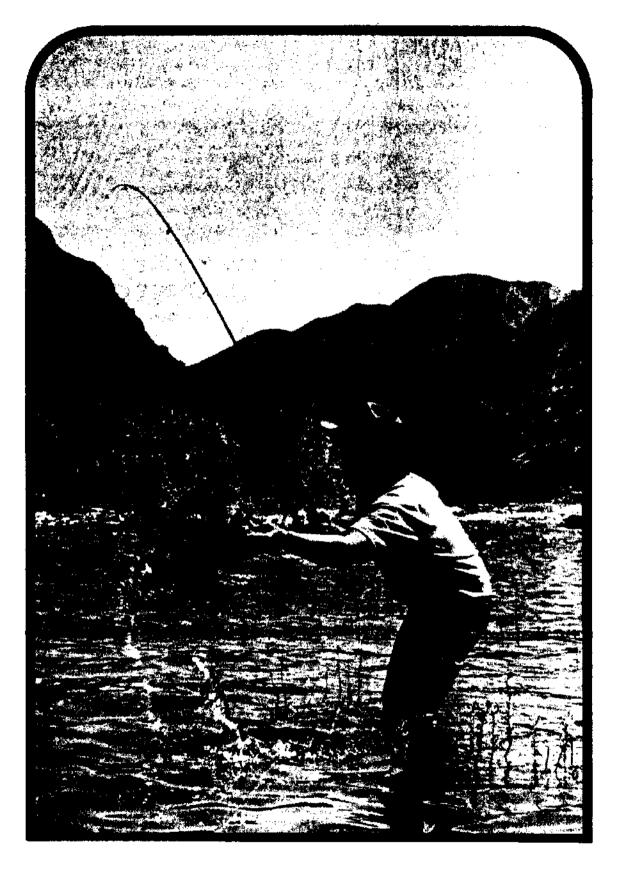
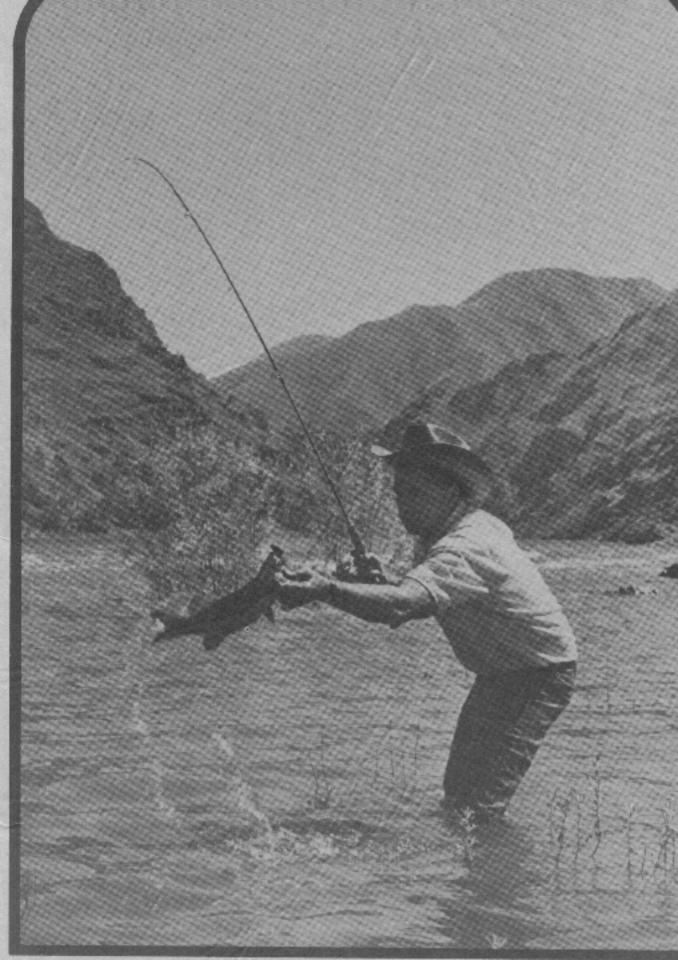
# \*\*ATTENTION\*\*

# This document is provided for historical purposes only.

Documents contained in the Washington Department of Fish and Wildlife Document & Publication Archive may contain dated and/or incorrect information. The WDFW Document & Publication Archive is provided as a service to those interested in the history of fish and wildlife management in Washington State.



WARM-WATER FISH OF WASHINGTON



# WARM-WATER FISH OF WASHINGTON

Prior to 1880 the only fresh-water fishes to be found in the State of Washington were some trout, whitefish, squawfish, suckers and smaller fish generally unimportant to the fisherman. As the human population started to increase, it became evident that the most accessible lowland lakes and streams with natural trout populations would not stand up under heavy fishing pressure. The desire to provide more fishing resulted in the importation of game fish species from other parts of the nation. Predominately by means of railroad tank cars, millions of young bass, crappie, sunfish, perch and catfish joined in the westward movement. Browns, brook trout, lake trout and Montana black spots were also brought into Washington.

By 1900 warm-water species were common in many of the lowland lakes of the state. Because of their tremendous reproductive potential, the warm-water species were soon providing anglers with a wider choice of fishing experience in nearly all parts of the Northwest.

The warm-water species known as "spinyrays" have been so named because their fins consist of sharp spines as well as soft rays. Trout and whitefish have only soft rays. Spiny-rayed game fishes in Washington represent three families: Centrarchidae, Percidae and Ictaluridae. Becoming acquainted with identification and habits of these fishes open new fields of interest and opportunity for the angler.

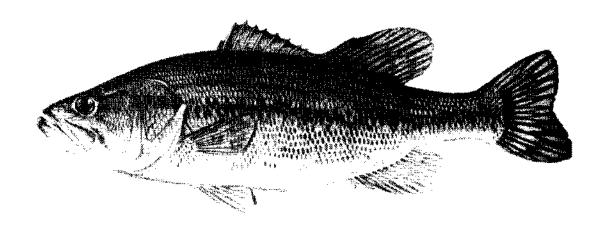
## Centrarchidae—THE SUNFISH FAMILY

Eight species of this family are present in Washington. They are identified by the presence of spiny rays and only one dorsal (top) fin. Members of this family spawn in late spring or early summer, the males excavating circular depressions in from one to ten feet of water in which the female deposits the eggs. The male guards the nest during incubation and early stages of fry growth. When his parental instinct wears off, the male is not above sampling a few of his offspring. Descriptions of the members of this family follow:

The LARGEMOUTH BASS is a popular game fish in Washington. Aptly described by its name, no other member of the family has such a gaping mouth. Unlucky prey of the bass are literally sucked into the gaping cavern of its open mouth. Other aids in identification:

- a) Dorsal fin is nearly divided into two parts.
- b) Dark stripe usually runs longitudinally the length of the body.
- c) Pectoral fins each have 13 or 14 rays.

The largemouth begins its spawning activity in the spring when water temperatures reach 60 to 65 degrees. Firm bottom areas about three feet in depth are preferred, but successful spawning is sometimes accomplished over earth, sand, and even silted bottoms. The amount of relatively shallow water in a lake effectively determines the carrying capacity of the lake for largemouths; this is the area in which they make their living.

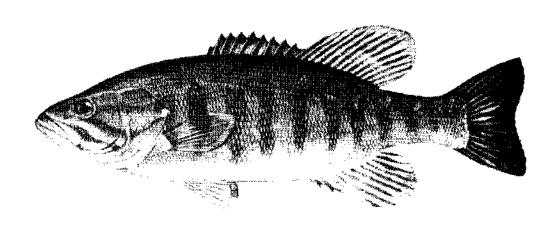


LARGEMOUTH BASS

As any fisherman knows, this fish is a temperamental and voracious feeder. At all ages the bass devours large food organisms and when only three-quarters of an inch long, the young will attempt to swallow other young fish. Bass feed on fish, crayfish, frogs, large insects — even snakes, mice, and young birds if they become available.

In fishing for largemouth, pick a lake with a shallow, weedly shoreline. A popular technique is fishing from a boat during the evening and at night casting a noisy surface lure toward shore into lily pads and other types of cover. This is where the small fish that the bass is feeding upon are hiding. Remember it is illegal to use a light that shines on the water if you go fishing at night. Spoons and other deep-running plugs are popular with bass, often ornamented with pork rind. Popper bugs and flies will produce fish for those with light tackle. Perhaps the most productive largemouth lure is a worm retrieved very slowly on the bottom. When you find a good feeding ground, fish it in the morning and evening. When the water warms, look for the fish in deeper water. Remember that a bass will often explode from the water in hitting a surface lure, so don't retrieve your lure too fast or the fish may miss. Bass are loners, and very wary in the shallows, but you will learn with some experimenting how to tease and wear away the fish's patience, getting it to strike.

Regardless of what area of the state you live in, you should have little trouble locating two to five pound largemouths. Eight pounders are more rare, and an eleven pound, nine ounce fish from Banks Lake is the current Washington State record largemouth bass.



**SMALLMOUTH BASS** 

The SMALLMOUTH BASS is often confused with the largemouth, yet it is a distinctly different fish, adapted to a different type of habitat:

- a) No longitudinal stripe; often mottled appearance with dark vertical bars.
- b) 16 to 17 rays in pectoral fins.
- c) Upper jawbone does not extend past the back of the eye.

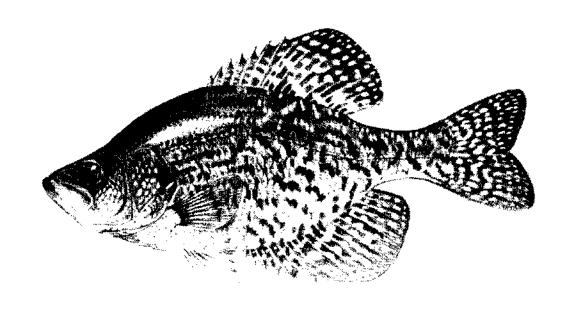
The smallmouth thrives in rivers or streams which have summer temperatures of 60-70 degrees and gravel bottom areas for spawning. It begins spawning activity when water temperatures reach 55 degrees, its success in lakes depends upon the presence of suitable gravel for spawning.

The smallmouth is even more temperamental than the largemouth, and often claimed to be the more vicious fighter. The best fish will put on a spectacular aerial show when hooked, throwing its head around like an unruly horse. Try a variety of lures, including wet flies. Don't overlook slow working models retrieved close to the bottom. Flow areas can be drifted with artificial lures and worms to good advantage. When the fish strikes an artificial lure, set the hook hard. With natural bait, the fish normally hits less surely, and may carry the bait a short distance, so wait to set the hook. One to three pound smallmouth are readily found in Washington, while a few up around seven pounds have been taken. A Columbia River smallmouth of eight pounds, twelve ounces is the current Washington State record.

The CRAPPIES come in two varieties, black and white, the black species being most common in Washington. Crappies may be recognized by their large, rounded, dorsal and anal fins and their deep but narrow bodies giving a pancake appearance. The black crappies have seven or eight dorsal spines and dark, irregularly spaced blotches on the side. The white crappie has only six dorsal spines and is shaded with a pattern of vertical bars.

Crappie are the earliest spawners of the Centrarchidae family, actively spawning when water temperatures approach 55 degrees. Unlike the bass, these fish are gregarious, and commonly found in schools.

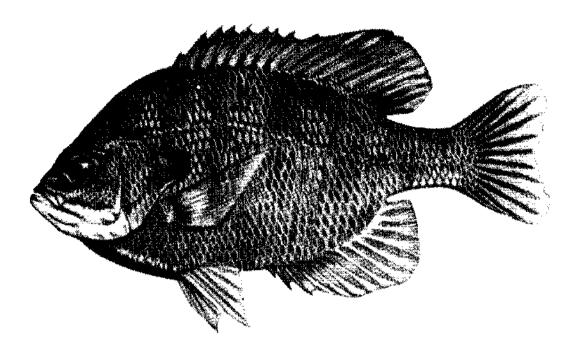
They are often found congregated around old pilings, snags or near the mouths of inlet streams. In the summer, fish may stay near bottom in 15-25 feet of water in deeper bays and channels. They will take nearly every kind of lure from garden tackle to your favorite bass plug.



#### **BLACK CRAPPIE**

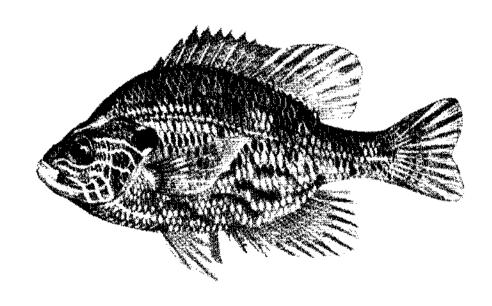
Remember that crappie have thin mouths, easily torn—use a net and handle gently. Use a very slow retrieve on artificials; the crappie is notoriously lazy and won't go far or fast for a meal. In the spring, when the crappie are spawning in the shallows, try flies or bass bug on a fly rod. Other good artificial baits are streamers, spinners, small spoons, small poppers, and high-riding hair bugs. Ten-inch crappie are good size for this species. The current Washington State record crappie is a four pound, eight ounce fish from Lake Washington.

BLUEGILLS and PUMPKINSEEDS are familiar to everyone who has enjoyed fishing warm-water lakes. Usually they are both called "sunfish." These "sunfish" have a smaller mouth than either bass, crappie or perch. Like the crappie, they are deep of body, but fairly thick from side to side. These are brightly colored little fish, and may be told apart most easily by remembering that the pumpkinseed has a bright red spot on the margin of the gill cover. In the bluegill, the spot is blue-black. The males may be told from the females, especially during spawning time, by the brighter color of the male bluegill and the larger red spot of the male pumpkinseed.



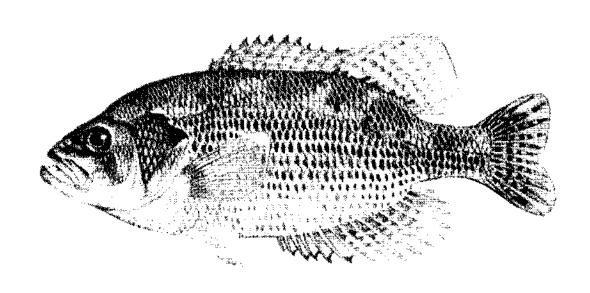
**BLUEGILL** 

Both fish characteristically are inhabitants of vegetated, quiet or slow moving waters. They spawn when water temperatures approach 70 degrees, congregating in large groups on common spawning grounds in water 6 to 12 inches deep. Bluegills may spawn into October.



**PUMPKIN SEED** 

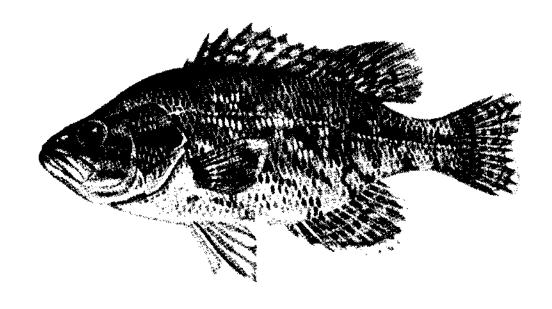
Of the two fishes, the bluegill attains the larger size. While some specimens over two pounds have been taken in Washington, a one-pounder is a big one. The official record is a bluegill of two pounds, one ounce, taken from the Potholes Reservoir in 1974. Pumpkinseeds may be caught up to one-half pound in weight. These fish are very active on the end of a line, bobber and worm being the most common type of fishing tackle used. A late evening session in a bluegill area, using flies and very light tackle, provides plenty of sport, and the fish has excellent flavor. Biting best in spring and autumn, bluegill may also be taken in mid-summer by fishing deep.



### **ROCKBASS**

The ROCK BASS and WARMOUTH BASS are another pair that look alike. Neither is common in the state. Both are stockily built, and from a side view have a body shape somewhat like the bluegill. Their mouths are quite large and strong, and both have reddish eyes. To tell the two apart remember that the rock bass has five spines in the anal fin, while the warmouth has three.

These two species grow rather slowly, and rarely exceed ten inches in Washington waters. The warmouth is the heavier of the two in comparison to its length. Because of their robust build, they are strong fighters, and will strike at anything from a bass lure to a worm.



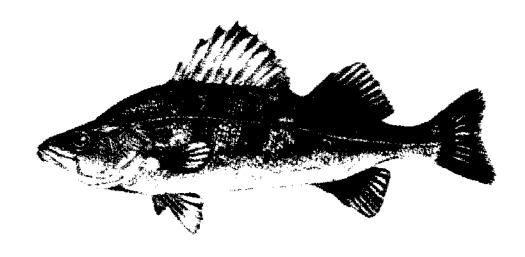
#### WARMOUTH

## Percidae—THE PERCH FAMILY

This family boasts only two common representatives in the state, yet on a numerical basis, probably contributes more to the annual catch than all the other warm-water species. The most popular member of this family is the YELLOW PERCH. Characteristics most useful in identification are:

- a) Yellow or greenish color, with about six dark vertical bars.
- b) One or two spines in the anal fin.
- c) Two rather large dorsal fins entirely separate from one another.

The yellow perch spawns even earlier than the crappie, beginning its activity when water temperatures reach 45 to 50 degrees. Spawning is extended over only a short period, each female extruding all her eggs at once. The eggs are contained in two skeins, which sink to the bottom or hang over vegetation or debris. Immediately after being expelled from the female, the skein expands to several times its former size. They may be easily seen in shallow areas when the water is calm. Young hatch in two or three weeks, and are tiny and hard to see. As they grow larger, vast schools may sometimes be observed near the surface. Young perch



#### YELLOW PERCH

provide a great deal of forage for other fish. Several factors counteract this heavy predation loss: perch begin spawning early in life; the female lays from 20,000 to 50,000 eggs; young perch hatch and begin to move to deeper water while temperatures are still rather cool for extensive spinyray activity. In fact, perch often become too populous, which causes a general growth stuntage. On a number of occasions their numbers have been reduced due to extensive disease mortality evidently peculiar to the species.

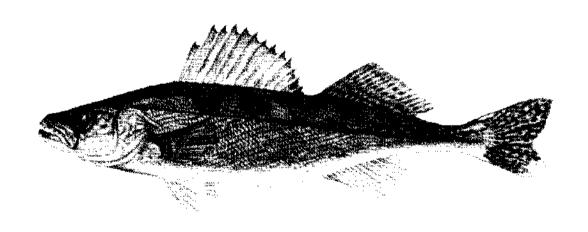
The yellow perch may be caught on nearly every type of freshwater lure. While the most common producer is the angleworm and bobber, various types of flies and small spoons are often effective. Ease of catch and plentiful numbers make the perch an ideal fish for the youngster, while the fine eating quality is a great incentive for the adult. What the perch usually lacks in fighting ability it makes up in table fare. Lake Stevens yielded the current record yellow perch, a dandy weighting two pounds, six ounces in 1979.

The only other member of this family which has made an appearance in Washington is the WALLEYE, also known as the walleyed pike and pike perch. This species is now found in Banks Lake, Billy Clapp Lake, the Potholes Reservoir, in the Spokane River, in Long Lake near Spokane, and in stretches of the upper Columbia River below Grand Coulee Dam, Chief Joseph Dam and Wells Dam as well as in Lake Roosevelt. Future expansion of the walleye fishery seems likely.

The walleye is easily recognized by the following characteristics:

- a) The walleye acquired its name because of its large, opaque, almost blind-looking eyes.
- b) The walleye has the characteristic round body of the perch family. The dorsal fin is divided into two well-separated portions consisting of 12 to 16 spines in the front portion, and 19 to 22 soft rays in the rear portion. The anal fin carries 2 spines followed by 12 to 14 soft rays.
- c) Body coloration is variable, but generally is dark olive green on the top and sides, blending into a lighter, sometimes pinkish, sometimes white, undersurface. The sides, particularly above the lateral line, show an overall irregular pattern of small, dark blotches. The walleye has a white tip on the lower lobe of the tail and a dark blotch on the membrane between the last three spines of the front dorsal fin.

Like the yellow perch, the walleye spawns when water temperature exceeds 45 degrees. A spawning location particularly favored by the walleye is where a rocky-bottomed, clear river enters a lake. The large number of eggs produced, between 23,000 and 50,000 per pound of



WALLEYE

spawning female, are randomly scattered over the spawning ground where the heavy and slightly adhesive eggs sink into rock crevices and hatch in 12 to 18 days.

The walleye is a voracious eater and is found at depths of 10 to 50 feet. Bait fishing or slow trolling of deep running lures seem to provide the best results. Once hooked, the walleye is not considered the greatest fighting fish, but is esteemed as possibly the finest eating freshwater game fish. The current Washington State record is a sixteen pound, fifteen ounce walleye, taken from Roosevelt Lake in 1977.

## Ictaluridae—THE CATFISH FAMILY

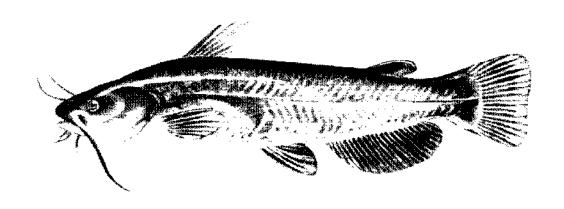
Whenever a homely, dark or slate colored fish with several "whiskers" or barbels dangling from its head appears in a freshwater angler's catch, he can be sure he has caught one of the four species of catfish which have been introduced. The eight fleshy barbels, the smooth scaleless body, presence of a fleshy adipose fin, and strong sharp spines in pectoral and dorsal fins identify this family. These fish spawn in secluded areas such as undercut banks, in old buckets, tires, or depressions which they scoop out of the mud. After spawning, the male drives his mate away from the nest and guards the eggs until they hatch, after which he will stay with the young for a time as they wander about in black schools. It is not an uncommon sight in June to see father catfish hovering about the nest making sure any hungry intruder does not make a meal of his offspring.

The common NORTHERN BROWN BULLHEAD can be identified by the presence of strong barbs on the back edge of its pectoral spine. This fish, as with other members of the catfish family, is often abundant in water a little muddier and warmer than most other fish like it. Having a highly developed sense of smell and touch, it is well equipped to negotiate murky waters and find food.

The female fish will lay from 2,000 to over 10,000 eggs, usually spawning in April and early May. In areas where there is little competition, the brown bullhead may completely take over a lake in two seasons. For this reason, there are many lakes which host large numbers

of bullhead too small to attract the fisherman, and too abundant to allow themselves enough food for further growth.

The most successful catfishing is done after dark. They will eat practically anything, but seem particularly attracted to odor. A cane pole, short line, bobber and bait are usually all the tackle that is required. Keepers come mostly in the one pound class, and those over twelve inches are considered good size. As with perch, most fishermen are attracted to the bullhead by their stomachs. Fillets of catfish caught in cool, clean water are thought of by many as the very ultimate in piscatorial cuisine.



#### **BROWN BULLHEAD**

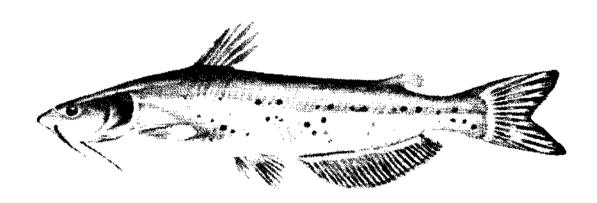
The NORTHERN CHANNEL CATFISH is distinctly different in appearance from the bullheads. The "channel cat" has a forked tail, a slaty to slivery body color—usually spotted with tiny black specks—and a much more streamlined head and body. It also attains a large size and has been known to grow to 35 pounds in California. The largest known channel cat taken in Washington weighed twenty-eight pounds, three ounces and came from the Yakima River in 1978.

This fish is almost entirely restricted to streams and rivers requiring colder, faster water than the bullhead. In the last several years, increasing numbers of this fish have been taken from the Columbia and Snake rivers. The channel cat spawns when water temperatures reach 75 degrees, females laying 2,500 to 20,000 eggs.

The most productive fishing procedure involves drifting nightcrawlers either along the stream bed or in eddies. Numerous other baits are

commonly used, such as crawfish tails, frogs, fish eggs, and insects. This fish is even more highly regarded than the bullhead for flavor, and may be commonly seen in the market as a product of a commercial fishery in the Mississippi river area.

Two other members of this family are present in Washington, although uncommon: the Yellow Bullhead and the Black Bullhead. Both resemble the brown bullhead in size and general appearance. The black bullhead is most tolerant of stagnant water and turbidity due to siltation. The yellow bullhead is largely a creek species adaptable to impoundments and some ponds which are not too turbid. The brown bullhead is the least tolerant of turbidity.



**CHANNEL CATFISH** 

All fish identification photographs courtesy of the North Carolina Wildlife Resources Commission.

# WARM-WATER FISHING AND MANAGEMENT

### THE NATURE OF SPINYRAYS AND HOW IT AFFECTS FISHING MANAGEMENT

The general nature of the warm-water species is distinctly different from that of our native game species such as the rainbow and cutthroat trout. Consideration of a few biological factors will serve to illustrate this basic difference.

1. The Growth Rate of a fish determines how long it will take from the time the fish leaves the egg to the time it reaches a size attractive to the angler. In the case of our native species, this takes about a year in a productive lowland lake. It has been found that west of the Cascades the largemouth bass requires an average of five years to reach the length of twelve inches. However, this growth is dependent upon the fertility of the water in which the fish live.

# COMPARATIVE GROWTH RATES FROM MOSES LAKE (EASTERN WASHINGTON) AND CAMPBELL LAKE (WESTERN WASHINGTON)

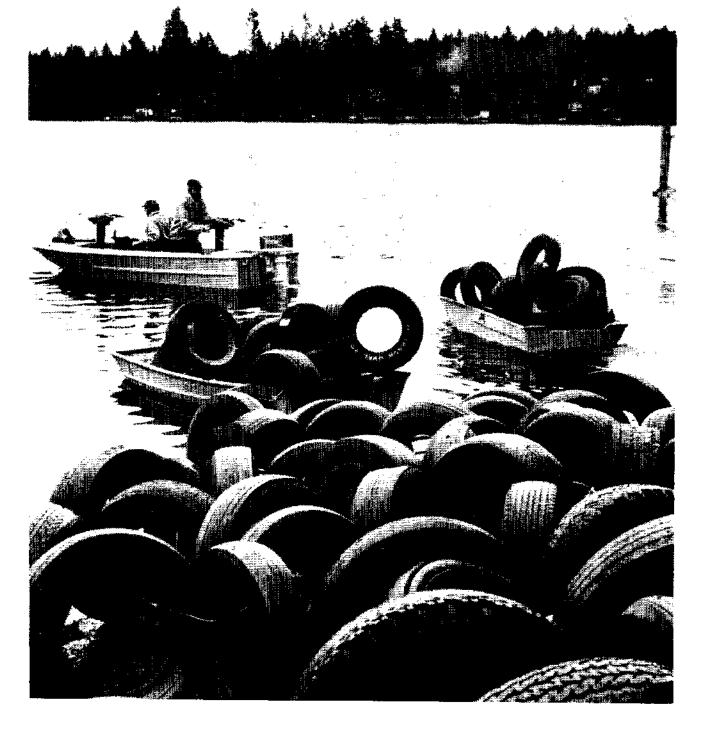
AGE (years)			LENGTH (inches)					
	Largemouth Bass		Bluegill		Perch		Crappie	
<del></del>	ML	CL	ML	CL	ML	CL	ML	CL
1	3.8	2.3	1.6		2.5	2.1	2.2	2.1
2	8.2	6.0	4.3		6.9	4.6	5.3	4.1
3	12.2	9.4	6.3		9.0	5.7	7.4	6.0
4	14.1	11.9	7.4		10.1	6.8	8.7	
5	15.5	13.8	8.1		11.4	7.1	10.1	

Some lakes contain five year old bass which are eight inches long; others may produce sixteen inch bass in five years. In the fertile, newly formed waters of the Columbia Basin, sixteen inch bass of about three pounds are produced in four years. This same general pattern holds true for all the spinyrays; each species requires a growth period of three to six years before they attain a size interesting to the average fisherman.

It is important to realize what this means for these warm-water species: The water in which they live must support not only the size







Fish biologists and spinyray fishermen's groups are experimenting with new ways to improve Washington's spinyray fishery. One way is pictured here: tires are sub-

merged and arranged in irregular artifical reefs on otherwise feature-less lake bottoms. The result is an improved bass habitat.

group that is contributing most to the fisherman's catch, but also several generations of younger fish that have not reached creel size.

2. Food Requirements of the spinyrays vary from tiny plankton organisms (for the young fish) to other fishes. All fish are fitted with "gill rakers" located on the arches that hold the gills, and which have the function of straining food organisms from the water. The size and shape of these rakers determines the type of food the fish can eat. Warm-water species have relatively large gill rakers and must depend on larger types of food organisms.

To attain the best growth results, there must be food organisms present suited to every size of fish: Zooplankton for the fry; abundant insect larvae forms for the three and four inch class; forage fish, crayfish, and other coarse food types to allow the bass, crappie or perch to continue growth during adulthood. This need for an abundance of large forage organisms places yet another demand upon the fertility of the water in which these fish live. The water must produce abundant small plankton forms, which are fed upon by both small fish and insects—these in turn are preyed upon by larger fishes. The nutritious materials then, are second or third hand by the time they are utilized for a meal by the predatory game species. As a principle, the more links necessary between the basic nutrients and the fish, the less efficient the lake's production process becomes.

3. Habitat is just as important for fish as it is for big game or upland birds. The trout fisherman will be found both near shore and in open water sections of the lake, because both areas produce the type of food the trout feed upon. But the experienced bass fisherman never rows to the center of a deep lake to begin fishing. He knows that however many bass there may be in that particular lake, their feeding range will not take them far from shore, for this is where the frogs, small fish, or insect nymphs are found. While this pattern is not quite as binding upon species such as crappie, perch, catfish, or bluegills, it still holds to a considerable degree, because the adults of these fish must depend upon organisms at least the size of insect larvae for their growth. As a result, most spinyrays use only the "littoral" or near-shoreline zone of the lake. Obviously then, the more shallow area and shoreline cover there is, the more habitat there will be for these species, and the better the fishing will be. In Washington it has been found that the larger bodies of water such as Lake Washington, Silver Lake, Lake Sammamish, and Potholes Reservoir, are the most consistent producers of spinyrays. In these waters there is generally only light fishing pressure per mile of shoreline.

Thus, a warm-water fishery must 1) Sustain at least three or four generations of fish to supply a sport fishery, 2) Provide a separate crop of small fish to feed the larger game fish, 3) Support the majority of its game fish population within a small percentage of the total volume of water.

A two-year catch survey in Silver Lake of Cowlitz County, one of the most consistent producers and most heavily fished mixed species lakes in Washington, showed the following results: A consistent catch from the lake of ten pounds of spinyrays per acre; composed of 50 per cent perch, 20 per cent crappie, 14 per cent catfish, 9 per cent bass, 7 per cent bluegills and pumpkinseeds.

Water temperature is one of the major factors affecting warm-water fish growth in the state of Washington. Perch prefer the temperature range 45-80, with temperatures exceeding 95 degrees being deadly.

Next up the scale are moderate temperature species – crappie, bass and other sunfish. These prefer the range 50-90 degrees. Crappie, rock bass, and smallmouth prefer the cool temperatures of this range, smallmouth often existing but one step removed from trout habitat. Largemouth like the middle range and the small sunfishes the warmest temperature. Channel and bullhead catfish are true warm water species, in the 55-95 degree range.

The significance of the temperature requirement is that warmer-water species require a total of more warmth through the year to achieve optimum growth. Largemouth bass, for instance, require waters where the temperatures reach 80 degrees for several months of the year for best growth.

So far as water oxygen levels are concerned, the lowest safe level for trout is 5 parts per million, but they can survive for short periods of time at 3 ppm. Centrarchids can exist slightly below 4 ppm and catfish do well at 3 ppm and lower.

Far more numerous than trout waters, suitable waters for spinyrays exist in abundance in Washington. There are some 200,000 acres of lakes, reservoirs and rivers which provide a wide variety of spinyray fishing. Most promising for the future of warm-water species are the newly created, warm and fertile waters of the Columbia Basin, but a fisherman in virtually any part of the state has some opportunity to enjoy the exciting angling offered by warm-water species.





# SOME POPULAR WARM-WATER FISHERIES

**COLUMBIA RIVER:** A new fishery for walleye is developing from Bonneville Dam up to and including Lake Roosevelt. Best areas are below the major dams where concentrations of these fish are found.

**NORTHWEST COUNTIES:** Lake Samish in Whatcom County for bass, perch and crappie; Big Lake in Skagit for the same as well as catfish; Sportsman's Lake on San Juan Island for bass.

**PUGET SOUND COUNTRY:** In Snohomish County Stevens Lake for large bass; Ballinger for bass, crappie and some perch. In King County, Lake Sammamish and Lake Washington for bass, crappie, perch and catfish. Long Lake in Kitsap County, Ohop Lake in Pierce County, and Patterson Lake in Thurston County (which contains some rock bass).

JEFFERSON COUNTY: Leland Lake for bass and catfish.

**PACIFIC COUNTY:** On Long Beach Peninsula perch and bass in several lakes including Cranberry, Island and Echo.

**COWLITZ COUNTY:** Silver Lake, probably best known westside spinyray water, with some big bass available along with crappie, perch, and some bluegill and catfish. Many sloughs in county also offer bass. Vancouver Lake and Campbell in Clark County contain many catfish, as well as bass, crappie and perch.

YAKIMA AREA: Some bass in Yakima River, and bass and crappie in Wenas Reservoir.

**OKANOGAN COUNTY:** Big Goose very popular for largemouth bass, Palmer Lake for bass and large crappie, Okanogan River from Omak to Oroville for smallmouth bass.

**GRANT COUNTY:** Unlimited spinyray fishing. Among others, Banks Lake, Evergreen Reservoir, Frenchman Hills and Winchester Wasteways for bass, perch and crappie, Potholes Reservoir for crappie, foot-long perch, bluegill and bass. Moses Lake for bluegill, catfish, crappie, some bass.

**SOUTHEAST AREA:** Snake River for top smallmouth fishing, as well as channel catfish. Also Grande Ronde River. McNary Reservoir for perch, crappie, largemouth and smallmouth bass.

**SPOKANE AND NORTH:** Eloika in Spokane County for bass, crappie and small sunfish; Downs for perch and crappie. Coffeepot in Lincoln County for mixed spinyrays. Deer Lake in Stevens County—one of relatively few lake trout waters—offers perch, crappie, largemouth and smallmouth. The lower Kettle and Pend Oreille rivers offer some bass.

## REPORTED RECORD GAME FISH CAUGHT IN WASHINGTON (As of July 1979)

(/ts of july 12/2)				
SPINYRAYS				
Bass, Largemouth – 11 lbs., 9 oz., Banks Lake	1977			
Bass, Smallmouth – 8 lbs., 12 oz., Columbia River				
Bluegill Sunfish – 2 lbs., 1 oz., Potholes Reservation	1974			
Crappie – 4 lbs., 8 oz., Lake Washington	1956			
Yellow Perch – 2 lbs., 6 oz., Lake Stevens	1979			
Walleye – 16 lbs., 15 oz., Roosevelt Lake	1977			
CATFISH				
Blue – 17 lbs., 12 oz., Columbia River	1975			
Channel – 28 lbs., 3 oz., Yakima River	1978			
TROUT				
Sea-run Cutthroat – 6 lbs., Carr Inlet	1943			
Resident Cutthroat — (Crescenti) — 12 lbs., Lake Crescent	1961			
Eastern Brook – 6 lbs., 12 oz., Lake Cavanaugh	1969			
Brown — 22 lbs., Sullivan Lake	1965			
Dolly-Varden – 22 lbs., 8 oz., Tieton River				
Mackinaw – 30 lbs., 4 oz., Loon Lake	1966			
Rainbow – 22 lbs., 8 oz., Waitts Lake	1957			
Rainbow (Beardslie) – 15 lbs., 4 oz., Lake Crescent				
Steelhead, winter-run – 32 lbs., 10 oz., Cowlitz River	1971			
Steelhead, summer-run – 35 lbs., 1 oz., Snake River	1973			
Kokanee (silvery trout) – 4 lbs., Deer Lake	1976			
COD				
Freshwater Ling (Burbot) — 13 lbs., 10 oz., Bead Lake	1978			
WHITEFISH				
Lake Whitefish – 5 lbs., 3 oz., Potholes Reservoir	1978			
Mountain Whitefish – 3 lbs., 13 oz., N. Fk. Stillaguamish				
River	1975			